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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,781	09/19/2003	Robert C. Michaels	S005 100094	6409

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EXAMINER

LEWIS, AARON J

ART UNIT PAPER NUMBER

3743

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/665,781

Applicant(s)

MICHAELS, ROBERT C.

Examiner

AARON J. LEWIS

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-18 is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4,6,7,8,9,11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albu ('149) in view of Rimkus ('491).

As to claim 1, Albu (figs.1,4,5,6) discloses a personal air purifier for insertion in a user's nose comprising: two semi-cylinders (figs.1-7) each having a base with a flat surface and a spherical shape on an end distal from the flat surface; and, a thin flexible band (18) integrally molded with the semi-cylinders and extending between the bases; the semi-cylinders sized such that upon insertion in a nostril the distal, spherical shaped end of each semi-cylinder is located inside the nasal vestibule and the base of each semi-cylinder is tucked in within the nostril just behind the ala, the flexible band extending over the end of the septum of the nose preventing overinsertion of one or both of the semi-cylinders and serving as a handle to remove the air purifier from the nose.

The difference between Albu and claim 1 is the two semi-cylinders being of porous foam filter media.

Rimkus, in a personal air purifier, teaches two semi-cylinders being of porous foam filter media (i.e. reticulated polyurethane as disclosed at col.6, lines 15-22) for the

purpose of providing a nose filter which is adhesively attached to the inner walls of a patient's nostrils thereby fixing the nose filter in place such that the nose filter and flange do not move during inhalation or exhalation (col.2, lines 37-50).

It would have been obvious to modify the filter material of Albu to make it from porous foam material because it would have provided a nose filter which is adhesively attached to the inner walls of a patient's nostrils thereby fixing the nose filter in place such that the nose filter and flange do not move during inhalation or exhalation as taught by Rimkus.

As to claim 2, Albu (figs.1-7) illustrates the semi-cylinders are tapered from the base toward the distal end.

As to claim 3, Rimkus illustrate the semi-cylinders have a plurality of circumferentially spaced flattened surfaces (26') intermediate the base and distal end.

As to claim 4, Rimkus discloses the foam filter media is reticulated foam (col.6, lines 15-22).

As to claim 6, Rimkus teaches the reticulated foam is selected from polyurethane (col.6, lines 15-22) or silicone chemical family and of the polyether or polyester category.

As to claim 7, Rimkus (col.6, lines 18-22) teaches the reticulated foam has about 40 to about 130 pores per inch.

Claims 8 and 9 are substantially equivalent in scope to claims 1 and 4 and are included in Albu as modified by Rimkus for the reasons set forth above with respect to claims 1 and 4, respectively.

Claims 11-15 are substantially equivalent in scope to claims 1-3,6,7 respectively, and are included in Albu as modified by Rimkus for the reasons set forth above with respect to claims 1-3,6,7.

3. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albu in view of Rimkus as applied to claims 1-4,6,7,8,9,11-15 above, and further in view of Kubik et al. ('682).

The difference between Albu as modified by Rimkus and claim 5 is the foam filter being a dielectric.

Kubik et al., in a personal air purifier, teach filtering material which is a dielectric for the purpose of improving certain aspects of filtering by providing a permanent electric charge (col.3, lines 40-54).

It would have been obvious to further modify the filtering material of Albu to employ a dielectric material because it would have improved filtering properties by providing a permanent electric charge as taught by Kubik et al..

Claim 10 is substantially equivalent in scope to claim 5 and is included in Albu as further modified by Kubik et al. for the reasons set forth above with respect to claim 5.

Allowable Subject Matter

4. Claims 16-18 are allowed.

Conclusion


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The balance of the art is cited to show relevant personal air purifiers in the form of nasal filters.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON J. LEWIS whose telephone number is (703) 308-0716. The examiner can normally be reached on 9:30AM-6:00PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY A. BENNETT can be reached on (703) 308-0101. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


AARON J. LEWIS
Primary Examiner
Art Unit 3743

Aaron J. Lewis
June 28, 2004